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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C PO BOX 7021 TROY, MI 48007-7021			EXAMINER GARCIA, ERNESTO	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,575

Applicant(s)

LAZIC ET AL.

Examiner

Ernesto Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date EFS73565.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to because the splines of the knuckles in Figure 1 appear as something else. Further, the upper joint 20, in Figure 1, is not the same joint as the lower joint 20. According to Figure 2, the upper joint shows the knuckle with a shoulder, which is not shown in one of the knuckles in the lower joint 20. Reference character "36" should have an arrow lead line otherwise 36 points to the same feature as "40".

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "36" shown in Figures 2 and 4.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "40" has been used to designate both an end section with a small diameter splined hole (Fig. 2) and another end section with a splined hole having a diameter larger than the small diameter splined hole (Fig. 2).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "20" has been used to designate both a joint with a first

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configuration of a screw 44 (Figures 1-2) and another joint with a second configuration of a screw 50 and no washer (Fig. 3).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "22" described on page 7, line 3, and "76" described on page 10, line 9.

The drawings are objected to under 37 CFR 1.83(a) because they fail to show feature 34 as splines as described in the specification on page 7, line 9. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. See MPEP § 608.02(d).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "50" and "74" have both been used to designate the same bolt.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "80" and "84" have both been used to designate the same splined cylinder.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the at least one of the

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internally splined central holes which is formed substantially perpendicular to the planar face of its knuckle being slightly angled (claims 4 and 9), and each of the knuckles attached to one of the members (claim 1, line 3 and claim 2, line 1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Applicants should note that a first knuckle is attached to a first member, and a second knuckle is attached to a second member, but not both knuckles are attached to one of the members.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because the description of reference numerals "40" and "44" are inconsistent. In a first instance, "40" is an end section as described on page 7, line 14. In a second instance, "40" is two units as described on page 7, line 18, and in a third instance, "40" is members as described on page 7, line 19. In regards to reference character "44", see page 8, lines 2 and 17. Appropriate correction is required.

The disclosure is objected to because the description, on page 7, line 14, that the knuckle 36a has an end section 40 is not accurate.

Claim Objections

Claims 7-10 are objected to because of the following informalities:

regarding claim 7, --comprising a first link and a second link-- should be inserted after "links" in line 2 or "a pair of elongated links" in line 2 should be rephrased as --a first elongated link and a second elongated link-- to provide proper antecedent basis to lines 3 and 5;

regarding claims 8-10, "joint" in line 1 should be --position support--; and,

regarding claim 9, "in a knuckle" in line 2 should be deleted, and "pins" in line 3 should be --pin--; and,

regarding claim 10, "they" in line 10 needs to be defined. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, there is an inconsistency between the language in the preamble and a certain portion in the body of the claim, thereby making the scope of the claims unclear. The preamble clearly indicated that the adjustable joint is "for fixing a pair of members in a chosen positional relationship". However, the body of the claim positively recites "one of the members", e.g., "a pair of knuckles, each attached to one of said members" (line 3), which indicates that the claims are being drawn to a combination of the "joint" and "the members". Accordingly, is the combination or subcombination being claimed? Appropriate correction, clarification, or both is required.

Regarding claim 2, how is the rotational position of each member relative to its knuckle able to be adjusted when the knuckle is attached to one of the members as required in lines 1-2? Applicants should note that the splines make rotational positioning impossible when the knuckles are attached to one of the members.

Regarding claim 4, there is an inconsistency between the language in the preamble and a certain portion in the body of the claim, thereby making the scope of the claims unclear. The preamble clearly indicated that the adjustable joint is "for fixing a pair of members in a chosen positional relationship". However, the body of the claim positively recites "one of the members", e.g., "each knuckle is attached to one of said members" (line 1), which indicates that the claims are being drawn to a combination of the "joint" and "one of the members". Accordingly, is the combination or subcombination being claimed? Appropriate correction, clarification, or both is required.

Regarding claims 4 and 9, the limitation "slightly" in claim 4, line 3, and in claim 9, line 2, is relative and undefined, which renders the claim indefinite. The term "slightly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Line 13, on page 4, indicates preferably around 1 degree, but it is unclear whether 10 degrees or more is included or not.

Regarding claim 5, the limitations “a first cylindrical splined section” in line 4 and “a second cylindrical section” in line 5 makes unclear whether the axially extending splines recited in claim 1, line 5, are on the first cylindrical splined section and the second splined section, or the axially extending splines of claim 1 are separate splines than those in the first and the second sections. The limitation “formed with different numbers of splines” in line 2 makes unclear whether the hole of one of the knuckles has different splines than that of the hole of the other knuckle, or the splines in the holes are different in number to the splines of the cylindrical pin.

Regarding claim 7, the metes and bounds of the claim is unclear. In particular, it is unclear what structure corresponds to the “means for fixing said article to a first end of the second of said links” as recited in line 5. The specification lacks description and does not define what structure corresponds to the means for fixing.

Regarding claim 10, the limitations “a first large diameter section” in line 4 and “a second smaller diameter section” in line 5 makes unclear whether the axially extending splines recited in claim 7, line 10, are on the first cylindrical splined section and the second splined section, or the axially extending splines of claim 7 are separate splines than those in the first and the second sections. The limitation “a different spline count” in line 3 makes unclear whether the hole of one of the knuckles has different splines than that of the hole of the other knuckle, or the splines in the holes are different in number to the splines of the cylindrical pin. Further, the limitation “a second smaller

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diameter" in line 5 raises the question: where's the first smaller diameter? The claim can't have a second smaller diameter without mentioning a first smaller diameter. Further, relative to what feature is the second diameter section considered "smaller"?

Regarding claims 3 and 6, the claims depend from claim 1 and therefore are indefinite.

Regarding claim 8, the claim depends from claim 7 and therefore is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Cole, 5,419,221.

Regarding claim 1, Cole discloses, in Figure 1, an adjustable joint comprising a pair of knuckles **13,17**, a cylindrical pin **27**, and means **47** for locking the cylindrical pin **27**. Each of the knuckles **13,17** has an internally splined central hole **39,55**. The

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cylindrical pin **27** is formed with axially extending splines **29,31**. The means **47** locks the cylindrical pin **27** in the central hole **39,55** of each of the knuckles **13,17**.

Regarding claim 3, each of the knuckles **13,17** has a planar face **45** and the central hole **39,55** of each of the knuckles **13,17** is formed about an axis substantially perpendicular to the planar face **45b**.

Claims 1, 3, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Warshawsky, 4,582,445.

Regarding claim 1, Warshawsky discloses, in Figures 1 and 3, an adjustable joint **50** comprising a pair of knuckles **52,80**, a cylindrical pin **100**, and means **108** for locking the cylindrical pin **100**. Each of the knuckles **52,80** has an internally splined central hole **90,92**. The cylindrical pin **100** is formed with axially extending splines **98**. The means **108** locks the cylindrical pin **100** in the central hole **90,92** of each of the knuckles **52,80**.

Regarding claims 3 and 8, each of the knuckles **52,80** has a planar face **45** and the central hole **90,92** of each of the knuckles **52,80** is formed about an axis substantially perpendicular to the planar face **56**.

Regarding claim 7, Warshawsky discloses, in Figures 1 and 3, an adjustable position support stand comprising an elongated first link **14** and an elongated second

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link **A20** (see marked-up attachment), a base **18**, means **12** for fixing an article to a first end of the second link **A20**, and an adjustable joint **50**. The adjustable joint **50** comprises a pair of knuckles **52,80**, a cylindrical pin **100**, and means **108** for locking the cylindrical pin **100**. Each of the knuckles **52,80** has an internally splined central hole **90,92**. The cylindrical pin **100** is formed with axially extending splines **98**. The means **108** locks the cylindrical pin **100** in the central hole **90,92** of each of the knuckles **52,80**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warshawsky, 4,582,445, as applied to claims 1, 3, 7, and 8 above, and further in view of Hathorn, 1,990,990.

Regarding claim 2, Warshawski, as discussed above, discloses each of the knuckles attached to one of a pair of members **14**, **A20** by a connection which is not a splined connection comprising a cylindrical member having axially extending splines and a hole having internal splines. Hathorn teaches, in Figure 5, knuckles **22a**, **22c**

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each attached to one member by means of a splined connection comprising a cylindrical member 10 having axially extending splines 11 and a hole 14 having internal splines to position the knuckles at any desired angular relationship (col. 2, lines 45-49). Therefore, as taught by Hathorn, it would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the members by means of a splined connection comprising a cylindrical member having axially extending splines and a hole having internal splines to position the knuckles at any desired angular relationship.

Allowable Subject Matter

Claims 4-6, 9, and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 4, the prior art of record does not disclose or suggest an adjustable joint comprising at least one internally splined central hole of a pair of knuckles formed substantially perpendicular to the planar face of the knuckles angled with respect to the planar face.

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Regarding claim 9, the prior art of record does not disclose or suggest an adjustable position support comprising an adjustable joint comprising at least one splined central hole of a pair of knuckles formed at an angle that deviates from perpendicular to a planar face of the knuckles.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30-5:30. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.G.

E.G.

September 29, 2005

Attachment: one marked-up page of Warshawsky, 4,582,445.



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

FIG. 1

